



1600

RAW SEQUENCE LISTING

DATE: 11/21/2002

PATENT APPLICATION: US/08/832,443C

TIME: 14:35:54

Input Set : A:\08832443.txt

Output Set: N:\CRF4\11212002\H832443C.raw

SEQUENCE LISTING

4 (1) GENERAL INFORMATION:

6 (i) APPLICANT: TSYRLOVA, IRENA

7 WOJPE, STEPHEN D.

9 (ii) TITLE OF INVENTION: INHIBITOR OF STEM CELL PROLIFERATION AND
10 USES THEREOF

12 (iii) NUMBER OF SEQUENCES: 36

14 (iv) CORRESPONDENCE ADDRESS:

15 (A) ADDRESSEE: NIXON & VANDERKYE P.C.

16 (B) STREET: 1100 NORTH GLEBE ROAD

17 (C) CITY: ARLINGTON

18 (D) STATE: VIRGINIA

19 (E) COUNTRY: U.S.A.

20 (F) ZIP: 22201-4514

22 (v) COMPUTER READABLE FORM:

23 (A) MEDIUM TYPE: floppy disk

24 (B) COMPUTER: IBM PC compatible

25 (C) OPERATING SYSTEM: PC-DOS/MS-DOS

26 (D) SOFTWARE: MS Word

28 (vi) CURRENT APPLICATION DATA:

C--> 29 (A) APPLICATION NUMBER: US/08/832,443C

C--> 30 (B) FILING DATE: 03-Apr-1997

31 (C) CLASSIFICATION:

33 (vii) PRIOR APPLICATION DATA:

34 (A) APPLICATION NUMBER: US 08,627,173

35 (B) FILING DATE: 03-APR-1996

36 (2) INFORMATION FOR SEQ ID NO: 1:

40 (i) SEQUENCE CHARACTERISTICS:

41 (A) LENGTH: 13 amino acids

42 (B) TYPE: amino acid

43 (C) STRANDEDNESS:

44 (D) TOPOLOGY: linear

46 (ii) MOLECULE TYPE: peptide

48 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:

50 Phe Pro His Phe Asp Leu Ser His Gly Ser Ala Gln Val

51 1 5 10

54 (2) INFORMATION FOR SEQ ID NO: 2:

56 (i) SEQUENCE CHARACTERISTICS:

57 (A) LENGTH: 15 amino acids

58 (B) TYPE: amino acid

59 (C) STRANDEDNESS:

60 (D) TOPOLOGY: linear

62 (ii) MOLECULE TYPE: peptide

ENTERED

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64 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
65 Cys Phe Pro His Phe Asp Leu Ser His Gly Ser Ala Gln Val Cys
66 1 5 10 15
71 (2) INFORMATION FOR SEQ ID NO: 3:
72 (i) SEQUENCE CHARACTERISTICS:
73 (A) LENGTH: 19 amino acids
74 (B) TYPE: amino acid
75 (C) STRANDEDNESS:
76 (D) TOPOLOGY: linear
77 (ii) MOLECULE TYPE: peptide
80 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
81 Asp Ala Leu Trp Asn Ala Val Ala His Val Asp Asp Met Pro Asn Ala
82 1 5 10 15
83 Leu Ser Ala
84 (2) INFORMATION FOR SEQ ID NO: 4:
85 (i) SEQUENCE CHARACTERISTICS:
86 (A) LENGTH: 12 amino acids
87 (B) TYPE: amino acid
88 (C) STRANDEDNESS:
89 (D) TOPOLOGY: linear
90 (ii) MOLECULE TYPE: peptide
93 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
94 Leu Val Val Tyr Pro Trp Thr Gln Arg Phe
95 1 5 10
100 (2) INFORMATION FOR SEQ ID NO: 5:
101 (i) SEQUENCE CHARACTERISTICS:
102 (A) LENGTH: 8 amino acids
103 (B) TYPE: amino acid
104 (C) STRANDEDNESS:
105 (D) TOPOLOGY: linear
106 (ii) MOLECULE TYPE: peptide
109 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
110 Leu Val Val Tyr Pro Trp Thr Gln Arg
111 1 5
114 (2) INFORMATION FOR SEQ ID NO: 6:
115 (i) SEQUENCE CHARACTERISTICS:
116 (A) LENGTH: 8 amino acids
117 (B) TYPE: amino acid
118 (C) STRANDEDNESS:
119 (D) TOPOLOGY: linear
120 (ii) MOLECULE TYPE: peptide
123 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
124 Leu Val Val Tyr Pro Trp Thr Gln
125 1 5
137 (2) INFORMATION FOR SEQ ID NO: 7:
138 (i) SEQUENCE CHARACTERISTICS:
139 (A) LENGTH: 7 amino acids
140 (B) TYPE: amino acid
141 (C) STRANDEDNESS:

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143      (D) TOPOLOGY: linear
145      (ii) MOLECULE TYPE: peptide
147      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
149      Leu Val Val Tyr Pro Trp Thr
150      1      5
153 (2) INFORMATION FOR SEQ ID NO: 8:
155      (i) SEQUENCE CHARACTERISTICS:
156          (A) LENGTH: 6 amino acids
157          (B) TYPE: amino acid
158          (C) STRANDEDNESS:
159          (D) TOPOLOGY: linear
161      (ii) MOLECULE TYPE: peptide
163      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
165      Leu Val Val Tyr Pro Trp
166      1      5
169 (2) INFORMATION FOR SEQ ID NO: 9:
171      (i) SEQUENCE CHARACTERISTICS:
172          (A) LENGTH: 1 amino acids
173          (B) TYPE: amino acid
174          (C) STRANDEDNESS:
175          (D) TOPOLOGY: linear
177      (ii) MOLECULE TYPE: peptide
179      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
181      Leu Val Val Tyr Pro
182      1      4
185 (2) INFORMATION FOR SEQ ID NO: 10:
187      (i) SEQUENCE CHARACTERISTICS:
188          (A) LENGTH: 1 amino acids
189          (B) TYPE: amino acid
190          (C) STRANDEDNESS:
191          (D) TOPOLOGY: linear
193      (ii) MOLECULE TYPE: peptide
195      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:
197      Val Val Tyr Pro Trp Thr Gln
198      1      5
201 (2) INFORMATION FOR SEQ ID NO: 11:
203      (i) SEQUENCE CHARACTERISTICS:
204          (A) LENGTH: 7 amino acids
205          (B) TYPE: amino acid
206          (C) STRANDEDNESS:
207          (D) TOPOLOGY: linear
209      (ii) MOLECULE TYPE: peptide
211      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:
213      Tyr Pro Trp Thr Gln Arg Phe
214      1      5
217 (2) INFORMATION FOR SEQ ID NO: 12:
219      (i) SEQUENCE CHARACTERISTICS:
220          (A) LENGTH: 6 amino acids
221          (B) TYPE: amino acid

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222 (C) STRANDEDNESS:
223 (D) TOPOLOGY: linear
225 (ii) MOLECULE TYPE: peptide
227 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:
229 Tyr Pro Trp Thr Gln Arg
230 1 5
232 (2) INFORMATION FOR SEQ ID NO: 13:
233 (i) SEQUENCE CHARACTERISTICS:
235 (A) LENGTH: 5 amino acids
236 (B) TYPE: amino acid
237 (C) STRANDEDNESS:
238 (D) TOPOLOGY: linear
240 (ii) MOLECULE TYPE: peptide
242 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:
244 Tyr Pro Trp Thr Gln
245 1 5
247 (2) INFORMATION FOR SEQ ID NO: 14:
248 (i) SEQUENCE CHARACTERISTICS:
250 (A) LENGTH: 6 amino acids
251 (B) TYPE: amino acid
252 (C) STRANDEDNESS:
253 (D) TOPOLOGY: linear
255 (ii) MOLECULE TYPE: peptide
257 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14:
259 Arg Met Trp Met Phe Arg
260 1 5
262 (2) INFORMATION FOR SEQ ID NO: 15:
263 (i) SEQUENCE CHARACTERISTICS:
265 (A) LENGTH: 423 base pairs
266 (B) TYPE: nucleic acid
267 (C) STRANDEDNESS: single
268 (D) TOPOLOGY: linear
269 (ii) MOLECULE TYPE: DNA (genomic)
271 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 15:
273 GTGCTSTCTG CTGAGATAA GACCAACGTC AAGGCCGCGT GGGGTAAAGGT CGGCGCGGCAC 60
275 GCGGGCGAGT ATGAGCGGA GGCCTGGAG AGGATGTTCC TGTCTTCCC CACCAACCAAG 120
277 ACCTACTTCC CGCATTCGA CCGAGGCAC GGCTCTGCCC AGGTAAAGGG CCACGGCAAG 180
279 AAGTGGCCG AGGAGTCAC CAGCGCGTG GGCACGTGG ACGACATGCC CAACGGGCTG 240
281 TCGGCCCTGA GGAATTCGA CGCCACAAG CTTCGGGTGG ACCGGGTCAA CTCAAGCTC 300
283 CTAAGCCACT GCGTCTGCT GACCTGAGC GCGCACCTCC CGCCGAGTT CACCCCTGCG 360
285 GTGCACGCC CTCTGACAA GTTCTGCT TCTGTGAGCA CCGTGCTGAC CTCCAAATAC 420
287 CGT 423
289 (2) INFORMATION FOR SEQ ID NO: 16:
290 (i) SEQUENCE CHARACTERISTICS:
292 (A) LENGTH: 141 amino acids
293 (B) TYPE: amino acid
294 (C) STRANDEDNESS:
295 (D) TOPOLOGY: linear
297 (ii) MOLECULE TYPE: peptide

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304 (x1) SEQUENCE DESCRIPTION: SEQ ID NO: 16:

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306 Val Leu Ser Pro Ala Asp Lys Thr Asn Val Lys Ala Ala Trp Gly Lys
307      1           5           10           15
309 Val Gly Ala His Ala Gly Glu Tyr Gly Ala Glu Ala Leu Glu Arg Met
310      20           25           30
312 Phe Leu Ser Phe Pro Thr Thr Lys Thr Tyr Phe Pro His Phe Asp Leu
313      35           40           45
315 Ser His Gly Ser Ala Glu Val Lys Gly His Gly Lys Lys Val Ala Asp
316      50           55           60
318 Ala Leu Thr Asn Ala Val Ala His Val Asp Asp Met Pro Asn Ala Leu
319      65           70           75           80
321 Ser Ala Leu Ser Asp Leu His Ala His Lys Leu Arg Val Asp Pro Val
322      85           90           95
324 Asn Phe Lys Leu Leu Ser His Cys Leu Leu Val Thr Leu Ala Ala His
325      100          105          110
327 Leu Pro Ala Glu Phe Thr Pro Ala Val His Ala Ser Leu Asp Lys Phe
328      115          120          125
330 Leu Ala Ser Val Ser Thr Val Leu Thr Ser Lys Tyr Arg
331      130          135          140

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335 (2) INFORMATION FOR SEQ ID NO: 17:

336 (i) SEQUENCE CHARACTERISTICS:

337 (A) LENGTH: 438 base pairs

338 (B) TYPE: nucleic acid

339 (C) STRANDEDNESS: single

340 (D) TOPOLOGY: linear

341 (ii) MOLECULE TYPE: DNA (genomic)

342 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 17:

```

347 GTGCACTGTA CTCTGAGGA GAAGTCTGGC GTTACTACCC TGTGGGGCAA GGTGAACGTG      60
348 GATGAAGTGG CTGGTGAGGC CCTGGGCAGG CTGCTGTGGT TCTACCTTTG GACCCAGAGG      120
349 TTCTTTGAGT CTTTGGGACA TCTGTCACT CTGATCTGTT TTATGGGCAA CCTAAGGTG      180
350 AAGGCTCATG GCAAGAAAT CTTGGGTGGC TTTAGTATAT GCGTGGCTCA CCTGGACAAC      240
351 CTCAGGGGCA CTTTGGGAC ACTGATTGAG CTGCACTGTG ACAAGCTGCA CGTGGATCCT      300
352 GAGAACTTCA GCTTATGGG CAACCTGCTG GTTGTGTGTC TGGGCCATCA CTTTGGCAAA      360
353 GAATTACCC CAGAGTCCA GGCTGATAT CAGAAATGG TGGCTGGTGT GGCTAATGCC      420
354 CTGGCCACCA AATATCAC
355

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354 (2) INFORMATION FOR SEQ ID NO: 18:

355 (i) SEQUENCE CHARACTERISTICS:

356 (A) LENGTH: 146 amino acids

357 (B) TYPE: amino acid

358 (C) STRANDEDNESS:

359 (D) TOPOLOGY: linear

360 (ii) MOLECULE TYPE: peptide

361 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 18:

```

366 Val His Leu Thr Pro Glu Glu Lys Ser Ala Val Thr Ala Leu Trp Gly
367      1           5           10           15
369 Lys Val Asn Val Asp Glu Val Gly Gly Glu Ala Leu Gly Arg Leu Leu
370      20           25           30
372 Val Val Tyr Pro Trp Thr Gln Arg Phe Phe Glu Ser Phe Gly Asp Leu
373      35           40           45

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